#### **PATENT**

#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

### **Present Application:**

Applicant : Todd W. Seeley

Title : huBUB3 GENE INVOLVED IN HUMAN CANCERS

Docket No. : PP-01406.004 / 200130.438D1

Date : February 27, 2002

### **Prior Application:**

Examiner : Sumesh Kaushal Ph.D.

Art Unit : 1633

Application No.: 09/208,743

Box Patent Application Commissioner for Patents U.S. Patent and Trademark Office P.O. Box 2327 Arlington, VA 22202

### PRELIMINARY AMENDMENT

### Commissioner for Patents:

Please amend the above-identified application as follows:

### In the Specification:

Please replace the paragraph beginning at page 7, line 4, with the following rewritten paragraph:

--Figure 3. Alignment of related proteins scBUB3, muBUB3, huBUB3 (2.7), hu-rae1, rae-1 (Schizosaccharomyces pombe), scYET7, scBUB3, hu-rae1, sp-rae1 and scYET7 sequences were obtained from Genbank. The murine sequence is derived from Genbank entry U67327, corrected using overlapping murine EST entries for a reading frame error which

truncated the predicted reading frame at the C-terminus. Predicted WD40 repeat regions are indicated with roman numerals. Conserved residues are indicated below the alignments.--

# In the Claims:

Please cancel claims 1-3 and 6-15 without prejudice.

Please add claims 42-48 as follows:

- 42. (New) An isolated huBUB3 polypeptide comprising amino acids at least 95% identical to a polypeptide comprising amino acids from about 1 to about 328 of SEQ ID NO:2.
- 43. (New) An isolated polypeptide wherein, except for at least one conservative amino acid substitution, said polypeptide has an amino acid sequence selected from the group consisting of:
- (a) a polypeptide comprising amino acids from about 1 to about 328 of SEQ ID NO:2; and
- (b) a polypeptide encoded by a polynucleotide at least 90% identical to the polynucleotide encoding (a).
  - 44. (New) An epitope-bearing portion of the polypeptide of SEQ ID NO:2.
- 45. (New) The epitope-bearing portion of claim 44, which comprises about 8 to about 25 contiguous amino acids of SEQ ID NO:2.
- 46. (New) The epitope-bearing portion of claim 44, which comprises about 10 to about 15 contiguous amino acids of SEQ ID NO:2.

47. (New) An isolated antibody that binds specifically to the polypeptide of claim 42.

48. (New) An isolated antibody that binds specifically to a polypeptide of claim 43.

#### **REMARKS**

With entry of this Preliminary Amendment, claims 4, 5 and 16-47 are pending in this application. New claims 42 and 43 are supported by original claims 1-3 and in the specification at least at page 8, lines 22-25 (claim 42) and page 15, lines 11-14 (claim 43). Claims 44-48 are supported in the specification at least at page 8, lines 7-10 and page 12, lines 11-31 (claims 44-46) and page 31, lines 6-11 (claims 47 and 48). No new matter is added.

Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached page is captioned "Version With Markings to Show Changes Made."

All of the claims remaining in the application are now clearly allowable. Favorable consideration and a Notice of Allowance are earnestly solicited.

Respectfully submitted,

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PATENT TRADEMARK OFFICE

## VERSION WITH MARKINGS TO SHOW CHANGES MADE

# In the Specification:

The paragraph beginning at line 4 of page 7 has been amended as follows:

Figure 3. Alignment of related proteins scBUB3, muBUB3, huBUB3 (2.7), hu-rae1, rae-1 (Schizosaccharomyces pombe), scYET7,[.] scBUB3, hu-rae1, sp-rae1 and scYET7 sequences were obtained from Genbank. The murine sequence is derived from Genbank entry U67327, corrected using overlapping murine EST entries for a reading frame error which truncated the predicted reading frame at the [N-terminus] C-terminus. Predicted WD40 repeat regions are indicated with roman numerals. Conserved residues are indicated below the alignments.

## In the Claims:

Claims 1-3 and 6-15 have been canceled.

New claims 42-48 have been added.

(JEP:cew) #251222